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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,651

03/25/2004

Satoshi Natsume

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EXAMINER

WANG, KENT F

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/808,651

**Applicant(s)**

NATSUME, SATOSHI

**Examiner**

Kent Wang

**Art Unit**

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/06/2004</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The reference listed on the disclosure statement (IDS) submitted on 10/06/2004 has being considered by the examiner (see attached PTO 1449).

### ***Drawings***

3. Figures 16 and 17 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).  
Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 and 7-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Sakamoto, US 5,893,651.

Regarding claim 1, Sakamoto discloses a drive controlling apparatus (i.e. camera control unit 140) for controlling a drive of a plurality of optical adjusting members provided on an optical apparatus, comprising:

- a memory (i.e. data storage section 149) storing preset drive information of each of the optical adjusting members (i.e. zoom position adjustment knob 141a, focus position adjustment knob 141b, and iris position adjustment knob 141c) (see col. 2, lines 13-21 and fig 2);
- a controller (i.e. control section 142) performing a preset drive control for controlling the drive of each of the optical adjusting members (i.e. position store key 141d and preset key 141e) on the basis of the preset drive information (i.e. zoom position voltage data and focus position voltage data), the controller performing the preset drive control (e.g. when the preset key is operated) so as to include a state in which the plurality of the optical adjusting

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members are simultaneously driven (see col. 3, line 52 to col. 4, line 3); and

- a selection member (i.e. operation section 141) being operated for selecting a set condition (e.g. using adjustment knobs 141a, 141b, and 141c) of drive speeds of the plurality of optical adjusting members out of a plurality of set conditions (see col. 2, lines 23-31);
- wherein the controller (142) sets the drive speeds in the preset drive control in accordance with the set condition selected with the selection member (e.g. using position store key 141d and preset key 141e) (see col. 3, line 52 to col. 4, line 3 and fig 2).

Regarding claim 8, Sakamoto discloses an optical apparatus comprising:

- a plurality of optical adjusting members (i.e. zoom operation mechanism 51, focus operation mechanism 52, and iris operation mechanism 53) (see col. 6, lines 23-36); and
- a drive controlling apparatus according to claim 1 (see discussion with rejected to claim 1 above).

Regarding claim 9, Sakamoto discloses an image-taking system (i.e. an image pickup system 1) comprising:

- an optical apparatus having a plurality of optical adjusting members (51, 52, 53); and
- a drive controlling apparatus according to claim 1; and
- a camera (i.e. camera apparatus 3) attached with the optical apparatus (see col. 5, lines 55-67).

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Regarding claim 10, Sakamoto discloses an image-taking system (1) comprising:

- an optical apparatus according to claim 8 (see discussion with rejected to claim 8 above); and
- a camera (3) attached with the optical apparatus.

Regarding claim 2, Sakamoto discloses the drive controlling apparatus (140) wherein one of the plurality of set conditions is to set the drive speed of each optical adjusting member (e.g. using 141a for maximum zoom adjustment) to a maximum speed at which the optical adjusting member can be driven (see col. 2, lines 22-31 and col. 9, lines 34-42).

Regarding claim 3, Sakamoto discloses the drive controlling apparatus (140) wherein one of the plurality of set conditions is to set the drive speed of each optical adjusting member (e.g. using 141e for preset speed) to a preset speed stored in the memory (149) (see col. 2, lines 22-31).

Regarding claim 4, Sakamoto discloses the drive controlling apparatus (140) wherein one of the plurality of set conditions is to set the drive speed of a first optical adjusting member (141a, 141b, 141c, 141d, and 141e) out of the plurality of optical adjusting members to a preset speed (141e) stored in the memory (149), and to set the drive speed of other optical adjusting members such that the drive of the plurality of optical adjusting members up to the preset position (141d) stored in the memory is substantially simultaneously completed (col. 2, lines, 22-31).

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Regarding claim 7, Sakamoto discloses the drive controlling apparatus further comprising a characteristic setting member (i.e. zoom operation mechanism 51 and focus operation mechanism 52) for variably setting (e.g. according to a zoom drive signal 51a and 52a) the drive characteristic of the optical adjusting member at least one of the start time (e.g. when zoom position detection block 54 detects) or at the completion time (e.g. when outputs a zoom position indicating this zoom position) in the preset drive control (see col. 6, lines 37-64 and fig 3).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakamoto in view of Kaneko, US 6,035,137.

Regarding claim 5, Sakamoto disclose a drive controlling apparatus for controlling a drive of a plurality of optical adjusting members provided on an optical apparatus. Sakamoto does not does not explicitly disclose the one of the plurality of set conditions is to set a first drive speed of a first optical

adjusting member out of the plurality of optical adjusting members to a preset speed.

Kaneko discloses one of the plurality of set conditions is to set a first drive speed of a first optical adjusting member (i.e. zoom switch SW1) out of the plurality of optical adjusting members (i.e. switches SW1-SW5) to a preset speed (i.e. preset zoom rate, step S108), the first drive speed being a speed at which the drive of the first optical adjusting member (SW1) is most quickly completed (e.g. step S116 to complete the quick zooming) when the first optical adjusting member (SW1) is driven up to a preset position (S108) at the preset speed stored in the memory (i.e. step S104), respectively, and to set drive speeds of other optical adjusting members (SW2-SW5) such that the drive of the other optical adjusting members (SW2-SW5) up to preset positions stored in the memory (S104) are substantially simultaneously completed (see col. 7, lines 4-47 and fig 3).

Sakamoto and Kaneko are analogous art because they are from the same field of endeavor of drive controlling unit of an imaging pickup device. At the time of the invention, it would have been obvious to a person of the ordinary skill in the art to use Kaneko's lens drive unit in Sakamoto's drive controlling device. The suggestion/motivation would have been to enable a taking lens drive unit to perform the quick zooming at a high rate regardless of setting of maximum zooming rate, so that the rate setting by the maximum rate control is cancelled to zoom the taking lens in the telephoto direction at the preset zoom rate (see col. 1, lines 54-60 and col. 7, lines 34-38).



Regarding claim 6, Kaneko disclose one of the plurality of set conditions is to set a first drive speed of a first optical adjusting member (SW1) at which the drive of the first optical adjusting member (SW1) is most slowly completed (e.g. if the switch SW1 is OFF, the quick zooming function does not work thus the adjustment process is most slowly completed) when the first optical adjusting member (SW1) is driven up to a preset position (S108) at the preset speed stored in the memory (S104), respectively, out of the plurality of optical adjusting members (SW1-SW5) to a first speed, the first drive speed being a speed and to set drive speeds of other optical adjusting members (SW2-SW5) such that the drive of the other optical adjusting member (SW2-SW5) up to preset positions stored in the memory (S104) are substantially simultaneously completed.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Yoshikawa et al. US 2001/0040638 disclose an optical device which can be change and set preset velocity information and change the driving velocity of a lens or any other optical member in accordance with the operation of a predetermined operation means during preset drive control in an optical device or optical device driving unit for performing preset drive control of driving the lens or optical member at a velocity corresponding to pre-stored preset velocity information.

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- Kaneda US 6,070,016 discloses a lens control device which uses a zoom lens in which the state of marginal light quantity varies according to each focal length is arranged to compensate for a variation in marginal light quantity during zooming by detecting the focal length and controlling a maximum aperture diameter of an iris.

### ***Inquiries***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on 571-272-7772.

The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

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Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kent Wang

25 May 2007

  
CHANH D. NGUYEN  
SUPERVISORY PATENT EXAMINER